# Planning and Managing Windows 7 Desktop Deployments and Environments

- **Course Number:** 6294A
- **Course Length:** 5 Days

## Course Overview

This five-day course is intended for desktop administrators who want to specialize in desktop deployment, configuration, and management . In this course, students will learn how to plan and deploy Windows 7 desktops in large organizations . They will also learn how to design, configure, and manage the Windows 7 client environment. This course helps students prepare for the Exam 70-686, Pro: Windows 7, Enterprise Desktop Administrator.

## Prerequisites

Before attending this course, students must have:

- A solid understanding of TCP/IP and networking concepts.
- A solid Windows and Active Directory background. For example, domain user accounts, domain vs. local user accounts, user profiles, and group membership.
- A good understanding of scripts and batch files.
- A solid understanding of security concepts such as authentication and authorization.
- Performed a clean installation of Windows 7, Upgrade to Windows 7, and migrate user-related data and settings from Windows XP.
- Configured disks, partitions, volumes, and device drivers to enable Windows 7 to function as desired.
- Experience configuring and troubleshooting permissions and other settings to allow access to resources and applications on Windows 7 Systems.
- Experience configuring settings to enable network connectivity.
- Experience configuring and troubleshooting a wireless network connection.
- Experience configuring and troubleshooting Windows 7 security.
- Configure mobile computers and devices.
- Familiarity with the client administration capabilities of Windows Server and familiar with management tools such as the System Center suite of products.
- Familiarity with deployment, packaging, and imaging tools.
- The ability to work in a team/virtual team
- Trained and mentored others

## Audience

This course is intended for IT Professionals who are interested in specializing in Windows 7 desktop and application deployments and managing the desktop environments for large organizations. People attending this training could be support technicians or currently in deployment roles and are looking at taking the next step in their career or enhancing their skills in the areas of planning and deploying Windows 7 desktops.

# Course Outline

Guidelines for Resolving Application Compatibility Issues
**Lesson: Assessing and Resolving Application Compatibility Issues by Using ACT 5.5**
What is the Application Compatibility Toolkit?
ACT 5.5 System Requirements
Features of ACT 5.5
ACT 5.5 Architecture Overview
Compatibility Evaluators for Windows 7
How Application Compatibility Manager Helps in Collecting and Analyzing Application Data
Configuring and Using ACM
Using the Standard User Analyzer
Using the Compatibility Administrator Tool
Module 02 Review


**Module 03 - Evaluating Windows 7 Deployment Methods**                47m
**Lesson: Evaluating In-Place Deployment**
What is an In-Place Deployment?
Advantages and Disadvantages of In-Place Deployment
Considerations for In-Place Deployment
**Lesson: Evaluating Side-by-Side Deployment**
What is a Side-by-Side Deployment?
Advantages and Disadvantages of Side-by-Side Deployment
Considerations for Side-by-Side Deployment
Discussion: Determining a Deployment Scenario
**Lesson: Evaluating Lite-Touch Deployment Method**
Discussion: What is Lite-Touch Deployment?
Advantages of Lite-Touch Deployment
Considerations for Lite-Touch Deployment

Discussion: Determining the Feasibility of Using Lite-Touch Deployment Method
**Lesson: Evaluating Zero-Touch Deployment Method**
Discussion: What is Zero-Touch Deployment?
Advantages of Zero-Touch Deployment
Considerations for Zero-Touch Deployment
Discussion: Determining the Feasibility of Using Zero-Touch Deployment Method
Module 03 Review


**Module 04 - Designing Standard Windows 7 Images**                1h 18m
**Lesson: Overview of Windows 7 Installation Architecture**
Windows 7 Automated Installation Elements
What is Windows Imaging File Format?
Benefits of the WIM File Format
How Windows 7 Uses Modularization
The Windows 7 Imaging and Deployment Platform
Windows Setup Configuration Passes
**Lesson: Overview of the Imaging Process**
The Imaging Process
The Planning Phase

The Developing Phase
The Stabilizing Phase
**Lesson: Determining the Image Strategy**
Types of Images
What is an Image Strategy?
Considerations for Designing the Overall Image Strategy
Determining the Language Packs to be Added to an Image

Determining the Device Drivers to be Included in an Image
Determining the Applications to be Included in an Image
Determining the Method of Adding Updates to an Image
Discussion: Sharing Best Practices for Designing Images
**Lesson: Selecting the Image Servicing Methods**
Why Image Servicing?
Considerations for Choosing Offline Servicing
Considerations for Choosing Online Servicing
Module 04 Review

**Module 05 - Deploying Windows 7 by Using Windows AIK**             1h 5m
**Lesson: Overview of Windows AIK 2.0**
Key Features of Windows AIK 2.0
Overview of Tools Included in Windows AIK 2.0
Deployment Phases Supported by Windows AIK
Deployment Scenarios Supported by Windows AIK
**Lesson: Building a Reference Windows 7 Image by Using Windows SIM and Sysprep**
What is Windows SIM?
Demo - Using Windows SIM
Using Sysprep
**Lesson: Managing the Windows Pre-Installation Environment**
What is Windows PE?
Windows PE 3.0 Support Utilities
Demo - Customizing a Windows PE Boot Disk
**Lesson: Capturing, Applying, and Servicing a Windows 7 Image**
What is ImageX?
Managing WIM Files by Using ImageX
What is DISM?
Demo - Servicing Windows 7 Images by Using DISM
Servicing Windows PE Images
Module 05 Review

**Module 06 - Deploying Windows 7 by Using Windows
Deployment Services**                                                50m
**Lesson: Overview of WDS**
What is WDS?
WDS Role Services
Types of Images Supported by WDS
Process of Deploying Windows 7 by Using WDS
**Lesson: Designing and Configuring WDS for Windows 7 Deployment**

Considerations for Designing a WDS Environment
Demo - Configuring the WDS Server Role
Adding Boot and Install Images
Creating a Custom Install Image by Using the Image Capture Wizard
Demo - Provisioning Drivers by Using WDS
Configuring WDS to Manage Client Computer Requests
Deploying VHD Images by Using WDS
Module 06 Review

**Module 07 - Deploying Windows 7 by Using Lite Touch Installation**     45m
**Lesson: Designing the Lite Touch Installation Environment**
Process of Deploying Windows 7 by Using LTI
Considerations for Designing an LTI Environment
Discussion: Designing a Lite Touch Installation Environment for a Given Scenario
**Lesson: Implementing MDT 2010 for Deploying Windows 7**
Installing and Configuring MDT 2010
Demo - Configuring a Deployment Share
Demo - Creating a Task Sequence
Demo - Updating a Deployment Share
Installing Windows 7 by Using the Windows Deployment Wizard
Advanced Configuration Options for LTI Deployments
Module 07 Review

**Module 08 - Deploying Windows 7 by Using Zero Touch Installation**     1h 15m
**Lesson: Designing the Zero Touch Installation Environment**
Process of Deploying Windows 7 by Using ZTI
Packages and Images Required by the Task Sequence Process
Considerations for Designing a ZTI Environment
Discussion: Designing a Zero Touch Installation Environment for a Given Scenario
**Lesson: Performing Zero Touch Installation by Using MDT 2010 and Configuration Manager 2007**
Demo - The Configuration Manager Console
Demo - Installing Prerequisite Components for ZTI
Demo - Configuring Deployment Packages and Images
Demo - Configuring and Advertising Task Sequences
Module 08 Review

**Module 09 - Migrating User State by Using WET and USMT 4.0**     1h 12m
**Lesson: Overview of User State Migration**
What is User State Migration?
Tools for Migrating User State
Migrating User State by Using WET
**Lesson: Overview of USMT 4.0**
Process of Migrating User State by Using USMT 4.0
Features of USMT 4.0

Elements of USMT 4.0

User State Data that Can be Migrated by Using USMT 4.0

**Lesson: Planning User State Migration (USMT 4.0)**

Overview of Planning User State Migration

Determining What to Migrate

Choosing a Migration Store Type and Location

**Lesson: Migrating User State by Using USMT 4.0**

Creating the Config.xml File

Creating a Custom XML File

Capturing User State by Using ScanState

Restoring User State by Using LoadState

Performing an Offline Migration

Best Practices When Using USMT 4.0

Discussion: Troubleshooting Common Issues During Migration

Module 09 Review

**<u>Module 10 - Designing, Configuring, and Managing the Client Environment</u>** 2h 56m

**Lesson: Overview of Planning Client Configuration**

The Need for Planning Client Configuration

Methods for Implementing Client Configuration

Discussion: Advantages and Disadvantages of Client Configuration Implementation Methods

Discussion: Categories of Client Configuration Settings

**Lesson: Designing and Configuring Standard System Settings**

Standard System Settings

Determining the Standard System Settings

Demo - Configuring the Standard System Settings by Using Local Policies

**Lesson: Designing and Configuring Internet Explorer Settings**

Discussion: The Need for Configuring IE Settings

Privacy Features of IE 8.0

Demo - Security Features of IE 8.0

Discussion: Compatibility Features in Internet Explorer 8.0

What are Accelerators?

Discussion: Determining the IE 8.0 Settings

Demo - Configuring IE 8.0 Settings

**Lesson: Designing and Configuring Security Settings**

Determining the AppLocker Rules

Demo - Configuring and Enforcing AppLocker Rules

Determining the BitLocker Settings

Demo - Configuring BitLocker Settings

Demo - Determining and Configuring the UAC Settings

Determining the Firewall Rules and Settings

Demo - Configuring Firewall Settings

Demo - Determining and Configuring Windows Defender Settings

**Lesson: Designing and Implementing Group Policy**

How are GPOs Processed?

Synchronous and Asynchronous Processing of GPOs

Group Policy Inheritance
Loopback Processing
Group Policy Planning Considerations
Demo - Configuring Group Policy Settings and Preferences
Best Practices for Implementing Group Policy
**Lesson: Troubleshooting Group Policy**
Discussion: Reasons for Group Policy Application Failures
Discussion: Fixing Common Group Policy Problems
Group Policy Troubleshooting Tools
Process for Resolving Group Policy Application Failures
Module 10 Review


**Module 11 - Planning and Deploying Applications and
Updates to Windows 7 Clients**                                          11h 14m
**Lesson: Determining the Application Deployment Method**
Software Distribution in Configuration Manager 2007
Software Deployment by Using GPOs
Application Virtualization and TS RemoteApp
Comparing the Application Deployment Methods
Considerations for Using Different Types of Application Installation File Formats
**Lesson: Deploying the 2007 Microsoft Office System**
The 2007 Office System Deployment Process


Demo - Using the Office Customization Tool
Methods to Deploy the 2007 Office System
Troubleshooting a 2007 Office System Deployment
**Lesson: Planning and Configuring Desktop Updates by Using WSUS**
What is WSUS?
Update Management Process
Considerations for Managing Updates
Demo - Configuring the Automatic Updates Client by Using Group Policy

Demo - Managing Updates by Using the WSUS Administration Console
Module 11 Review


**Module 12 - Deploying Windows 7 - Challenge Scenario**              1h 16m
**Lab B: Deploying Windows 7 Using the LTI Deployment Plan**
Exercise 1: Performing a Network Assessment
Exercise 2: Configuring MDT 2010 for an LTI Deployment
Exercise 3: Configuring WDS for a PXE and Multicast Deployment
Exercise 4: Configuring an MDT 2010 Deployment Share
Exercise 5: Creating the Reference Computer
Exercise 6: Preparing the Deployment Task Sequences
Exercise 7: Performing an Upgrade on Target Computers
Module 12 Review
Course Closure


**Total Duration:** 15h 3m